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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,238	03/29/2001	Michael Federwisch	103.1064.01	6317

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EXAMINER

AL HASHEMI, SANA A

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,238

Applicant(s)

FEDERWISCH, MICHAEL

Examiner

Sana Al-Hashemi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claims Status: claims 1-35 are rejected

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-35 are rejected under 35 U.S.C. 102(e) as being anticipate by Kleiman et al (US 2001/0044807A1).

1. Regarding Claims 1, 14, 25, and 35, Kleiman discloses a method of propagating data, comprising:

mirroring the data from a first filer to a second filer (see paragraph [0008], [0024], Kleiman); and

mirroring the data from the second filer to a third filer (see Fig. 1, box 114, paragraph [0025], [0027], Kleiman);

wherein snapshots are used in mirroring the data (see Fig. 2, paragraph [0041], Kleiman).

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2. Regarding Claims 2, 15, and 26, Kleiman a method wherein the data is organized in one or more volumes on the filers, and wherein one or more of the volumes are mirrored (see paragraph [0118], Kleiman).

3. Regarding Claims 3, 16, and 27, Kleiman discloses a method wherein the first filer uses softlocks to mark snapshots needed for mirroring volumes from the first filer (see paragraph [0008], [0219], Kleiman¹).

4. Regarding Claims 4, 6, 7, 17, 19, and 28, Kleiman disclose a method wherein deletion of a snapshot marked with a softlock is prevented (see paragraph [0043] Kleiman²).

5. Regarding Claims 5, 18, and 29, Kleiman discloses a method wherein entry of a release command to the first filer informs the first filer that the second filer will no longer mirror the volume from the first filer, and wherein the softlocks are updated to indicate that any snapshot corresponding to the volume can be deleted (see paragraph [0138] Kleiman).

6. Regarding Claims 8, 20, and 30, Kleiman discloses a method wherein entry of a release command to the second filer informs the second filer that the third filer will no longer mirror the volume from the second filer, and wherein the softlocks are updated to indicate that any snapshot corresponding to the volume can be deleted.

7. Regarding Claims 9, 21, and 31, Kleiman discloses a method further comprising use of jump ahead protection during mirroring operations (see paragraph [0136], Kleiman³).

8. Regarding Claims 10, 22, and 32 Kleiman discloses a method wherein the jump ahead protection comprises preventing activation of a snapshot of a volume while mirroring the volume to another filer (see paragraph [0136], Kleiman).

¹ Examiner interprets the softlock an indicator.

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9. Regarding Claims 11, 12, 13, 23, and 33, Kleiman discloses a method wherein the second filer also mirrors one or more volumes from a fourth filer (see paragraph [0139], Kleiman).
10. Regarding Claim 24, Kleiman discloses a memory wherein the memory includes RAM, ROM, a disk, or a CD-ROM (see paragraph [0022], Kleiman).
11. Regarding Claim 34, Kleiman discloses a filer wherein the file system utilizes a write anywhere file system layout implemented on a redundant array of inexpensive disks (see paragraph [0021], Kleiman).

Other Prior Art Made of Record

1. Kleiman et al (US Pub. No. US 2001/0044807) disclose a file system image transfer.
2. Mcbrearty et al. (US Patent No. 6,216,211) discloses a method and apparatus for accessing mirrored logical volumes.
3. Bobbitt et al. (US Pub. No. 2003/0115218A1) discloses virtual file system.
4. Van Hoff et al. (US Patent No. 6,272,536) discloses a system and method for the distribution of code and data.

² Examiner interprets the steps of saving copied data as preventing the deletion of that data.

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Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to: Sana Al-Hashemi whose telephone number is (703) 305-4881. The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436. Any response to this office action should be mailed to: The Commissioner of Patents and Trademarks, Washington, D.C. 20231. Or telefax at phone number (703) 746-9890. For formal or draft communications, please label "PROPOSED" or "DRAFT". Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, 6th Floor Receptionist, Arlington, Virginia. 22202.

Sana Al-Hashemi
Patent Examiner
Technology Center 2100
June 30, 2003


WAYNE AMSBURY
PRIMARY PATENT EXAMINER

³ Examiner interprets the method of transmitting images to the destination as jump ahead.